

Program of 2022 Intensive Course
in Basic Science Fundamentals & Multidisciplinary Seminars

■ 1st day: Sep 13 (Tue)

- 14:00-15:20 **Introduce how to use laboratory animals in Research Center for Animal Life Science (RCALS) (Lecture) [on-site/zoom/video]**
Toshifumi Morimura, Hideaki Tsuchiya (Research Center for Animal Life Science)
- 15:30-16:50 **Overview of histochemistry and immunohistochemistry (Lecture (in English)) [on-site/zoom/video]**
Kinji Asahina (CRL)
- 17:00-18:20 **Making tissue sections from frozen and paraffin blocks (Practice) [on-site] * 1**
Kinji Asahina, Takefumi Yamamoto, Yasuhiro Mori, Tokio Terado, Nobutoshi Fukuhori (CRL)

■ 2nd day: Sep 14 (Wed)

- 14:00-15:20 **Practical use of MMC and IT security for medical research (Lecture) [on-site/zoom/video]**
Kenji Shigetoshi (MultiMedia Center)
- 15:30-16:50 **Introduction to modern confocal microscopy and its applications (Lecture (in English)) [on-site/zoom/video]**
Kinji Asahina, Takefumi Yamamoto, Yasuhiro Mori, Tokio Terado (CRL)
Collaborator: Andor Technology, Oxford Instruments
- 17:00-18:20 **Observation of tissue sections using laser fluorescence microscope (Practice) [on-site] * 2**
Kinji Asahina, Takefumi Yamamoto, Yasuhiro Mori, Tokio Terado, Nobutoshi Fukuhori (CRL)

■ 3rd day: Sep 15 (Thu)

- 14:00-15:20 **Introduction of cell culture and passaging (Lecture (in English) & Practice) [on-site] * 3(Practice only)**
Kinji Asahina, Takefumi Yamamoto, Yasuhiro Mori, Tokio Terado (CRL)
- 15:30-16:50 **Cytometry and fluorescence activated cell sorter (Lecture (in English)) [on-site/zoom/video]**
Kinji Asahina, Takefumi Yamamoto, Yasuhiro Mori, Tokio Terado (CRL)
Collaborator: Nippon Becton Dickinson Company, Ltd.
- 17:00-18:20 **Cytometry and fluorescence activated cell sorter (Practice) [on-site] * 4**
Kinji Asahina, Takefumi Yamamoto, Yasuhiro Mori, Tokio Terado (CRL)
Collaborator: Nippon Becton Dickinson Company, Ltd.

■ 4th day: Sep 16 (Fri)

- 14:00-15:20 **Radioisotope Experiments (Lecture) [on-site/zoom/video]**
Hisakazu Ogita, Nobutoshi Fukuhori, Yukiko Koyama, Takuya Nakase (CRL)
Collaborator: Sowa Trading Co.,Inc, Enoki Engineering Co., Ltd.
- 15:30-16:50 **Real-time quantitative PCR I (Lecture) [on-site/zoom/video]**
Kinji Asahina, Noboru Urushiyama, Takuya Nakase (CRL)
- 17:00-18:20 **Real-time quantitative PCR II (Practice) [on-site] * 5**
Kinji Asahina, Noboru Urushiyama, Takuya Nakase (CRL)

Lecture: Lecture Room A, 2nd floor, Basic Lecture and Practice Building

Practice * 1: Microscopy Sample Preparation Room #2, 4th floor, Central Research Laboratory

Practice * 2: Confocal Laser Scanning Microscope Lab #2 & #4, 4th floor, Central Research Laboratory

Practice * 3: Cell Culture Lab, 4th floor, Central Research Laboratory

Practice * 4: Cell Engineering Lab #4, 4th floor, Central Research Laboratory

Practice * 5: Molecular Biological Analysis Lab, 2nd floor, Central Research Laboratory

Ref. CRL laboratories http://www.crl.shiga-med.ac.jp/home/haichizu/crl_laboratories.pdf